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## POSSIBLE EFFECTS OF PENSION PLANS ON AGGREGATE NATIONAL SAVING

Given the sample results for personal saving, we fall short of knowing the total effect on national saving by the effects on business and government saving. No empirical evidence has been presented elsewhere for these two sectors, and none is presented here. Yet the range of possible effects seems limited on general grounds, and the following discussion of each sector presents some tentative conclusions.

### *1. Business Saving*

If employers' contributions to pension funds affect business saving (that is, retained earnings), they very likely do so by affecting profits via labor costs. The key to the effect of pensions on business saving, therefore, is the effect on total labor costs. Increases in pension benefits are typically not offset by reductions in take-home pay, and so usually raise total labor costs. The increased cost may exceed the rise in labor productivity, and so may reduce profits or raise selling prices. If prices cannot be raised commensurately, profits fall. The rise in labor costs in real terms is an initial effect, however, and may disappear in the long run. Even if it does not, the important question is whether the increase in costs from raising pension benefits is higher or lower than it would otherwise be. During World War II and part of the Korean War, firms could raise total wages to attract workers only by raising certain fringe benefits; wage controls fixed the maximum level of take-home pay, the actual amount of which was nearly always at the maximum level. Since then, firms can raise wages freely through either channel, and it is not obvious that *total* labor costs are affected by whether part finances pension benefits or all goes into pay checks.

A clever strategy in the bargaining game to subdue over-all demands by unexpectedly yielding ground on pension benefits might even keep total labor costs lower than they would otherwise be for a short time,

but a comparable tactic could be used just as well to produce a victory for the other side. Labor costs would be higher than otherwise if firms found that they could attract better workers with larger pension benefits than with higher take-home pay. But better workers presumably have higher productivity, so that total labor costs per unit of output need not increase. Or increased pension benefits may improve community relations, in which case they are a substitute for advertising or more conventional public relations. Properly interpreted, total labor costs have not increased at all, though they now include certain expenses previously listed under public relations.

One might still argue that labor costs are affected in two ways, one increasing and the other decreasing them. The first argument is that corporate managements are and have been willing to forego some profits in order to finance pensions, but will not voluntarily do so in order to increase take-home pay. This may be interpreted as a paternalistic concern for the welfare of employees and their families. In economic terms, it may be called an increase in the cost of employing large numbers of workers, which is consistent with the spread of pension plans first among the large corporations. The cost arises from social pressure and the need for good public relations, but it cannot be covered by higher selling prices and so falls on the equity capital of the business. In the long run, of course, the lower return on capital may reduce the flow of new equity capital into such businesses in favor of small companies not subject to these costs, but this is a very long-run consideration of uncertain importance. In this view, therefore, management grants pension benefits for noneconomic reasons, not simply to attract and hold workers, and charges this beneficence to the stockholders.<sup>1</sup>

The second argument is that pension plans increase corporate profits because of the efficiencies introduced. Pension plans help to retire workers at a set age and to preserve some flexibility in the organization. In addition, turnover of young workers is a serious problem that pension plans help to reduce, especially if fully vested rights are withheld

<sup>1</sup> Another possibility is that if firms do not set up an independent trust to administer the pension fund, they can borrow now from their future obligations, possibly more cheaply than they could from the market. Most corporations, however, are required to set up independent trusts, or do so on their own.

from younger workers.<sup>2</sup> And even with full vesting, there is an improvement in labor productivity attributable to the psychological benefits to older workers of a formal retirement plan and to younger workers of good chances for advancement as superiors retire at specific ages. In this view, therefore, pension costs are more than offset by various efficiencies, hence total labor costs are reduced and profits rise.

It may be questioned whether a factor of production can have its return reduced even though demand and supply conditions do not change, as does capital in the first argument; or even though its productivity rises, as does labor in the second argument. There are certainly more plausible explanations for the rapid growth of pension plans since World War II. Yet some firms may have adopted pension plans for such reasons. How the plans affect profits in general can only be determined by the evidence on comparative profits. One could test these hypotheses by comparing the profits of corporations with and without pension plans, after adjusting for other factors, but this would be a difficult task. Until convincing evidence either way is presented, therefore, the most plausible conclusion is that the form of payment does not have a large long-run effect on the level of profits. Hence, if (before-tax) profits are nearly the same as they would otherwise be, so presumably is business saving.

The only qualification is that business taxes might not be the same, which involves the broader relation between pension contributions and the level of taxation. We may treat this as part of the effect on the government sector.

## *2. Government Saving*

The immediate effect on the government of increasing pension contributions by employers is the loss of federal tax revenue. Employers'

<sup>2</sup>It has been suggested that pension plans help to reduce turnover specifically of employees who receive on-the-job training. An employer who wanted to improve his workers' productivity through a company-paid training program might be willing to make such investments and to increase his workers' gross pay (to keep them from going elsewhere with their better training and higher earning power) only if the increase is partly recoverable should some of these workers leave, as the increase would be if paid into a pension plan with vesting at or near retirement only. When pension plans are instituted for this reason, total labor costs will surely rise; but, if the training is effective, labor costs (including cost of training) per unit of output should fall. Otherwise there would be no point to the training. See Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis With Special Reference to Education*, New York, NBER, 1964, p. 27.

contributions and interest earnings of pension funds are not taxed as income to employees until received as retirement income. (This applies to pension plans of nonprofit corporations and government workers as well.) The federal government therefore fails to gain as much increased revenue from rising incomes (for some time at least) as it would if this exemption were not granted. As a result, it must either spend less than it otherwise would or, barring that, raise more revenues from other taxes and borrowing than it otherwise would. Obviously there is no way of telling, even on a general level, what the government did in the past and will do in the future solely in response to this loss in revenue, which is but one of many factors that affect the federal budget. Much less can we say which expenditures or taxes have been and will be affected. Broad generalizations must suffice.

Saving by the government, defined as cash income less cash expenditures, is presumably determined by factors far removed from the loss of pension revenue and is little affected by it. This is one of many possibilities, but it seems the most likely one. If so, the relevant consideration is the effect on private saving of the lower expenditures or higher other taxes resulting from the loss of pension revenue. Insofar as expenditures are lower,<sup>3</sup> the net change in national saving can be measured by the change in private saving (already discussed) that results from the rise in pension contributions; the reduction in government expenditures by itself does not directly affect saving in the economy. (Any long-run effects of different levels of government expenditures on the growth in national income are too problematical to warrant attention here and may be ignored.) Insofar as taxes are higher on personal and business income, private saving will be reduced; insofar as they are higher on consumption, private saving will be reduced by less or even raised slightly because of the stimulus thus provided to substitute future for present consumption.

The maximum offset to the rise in personal saving produced by pension contributions occurs, therefore, if the government recovers the loss in revenue by a tax on income. Suppose, then, the government recoups by raising the tax on personal or corporate income. How much can this offset be? For every dollar that employers place in pension

<sup>3</sup> As one possibility, the growth of pension plans might lessen old-age assistance grants, though this is not likely until the plans spread to almost all, particularly itinerant, workers.

funds instead of pay checks, the loss in income taxes is at least 20 cents; on the average it may be as much as 30 cents. Let us use the latter figure as the upper limit. In raising 30 cents from the personal income tax, the government forces individuals to reduce over-all expenditures, of which at most 10–20 per cent on the average will come out of saving; hence the reduction in personal saving from the 30 cent tax is about 3–6 cents. In raising 30 cents from the corporate income tax, the government cuts after-tax profits at most by that amount. (Part of the tax may be shifted.) Corporations tend to retain a third to two-thirds of profits as saving, hence the reduction in corporate saving is roughly 10–20 cents.<sup>4</sup> At most, therefore, private saving is reduced by 20 cents for each dollar of employers' contributions to pension funds. Since employers contribute half or more but not all of the total, the net increase in national saving exceeds 80–90 per cent of the growth in pension funds.<sup>5</sup>

### 3. Summary

These calculations are extremely rough and depend on certain assumptions, yet they place the relevant magnitudes in perspective. The outside limit on the offset to employers' contributions seems to be a fifth, and more plausible assumptions (such as that any increase in taxes is levied on both corporate and individual income and that the corporate income tax is partly shifted) would put it considerably lower. We therefore conclude that the effect of the net growth in pension funds on national saving equals the effect on aggregate personal saving less zero to 20 per cent of employers' contributions.

This result takes benefit payment and interest earnings more or less as given. As benefits grow relative to contributions in the future, the estimates must be adjusted accordingly.

<sup>4</sup> The reduction in dividends by these figures will be 20–10 cents, respectively, and so will also cut stockholders' saving, but this will be negligible. Unincorporated business profits are largely taxed under the personal income tax. The effect on the saving of these businesses, because of their high average saving ratios, is probably more like that on corporations than it is on individuals.

<sup>5</sup> Challis Hall discusses different possibilities. See his "Retirement Contributions, the Spending Stream, and Growth," in Joint Economic Committee on the Economic Report, *Federal Tax Policy for Economic Growth and Stability*, Washington, 1955, pp. 786–797.